

Appln. No. 09/698,550  
Resp. dated May 1, 2006  
In Reply to Office Action of Dec. 30, 2005

### REMARKS

Claims 1-93 are pending in the present application. Claims 33-38 and 70-75 have been allowed. Claims 1-32, 39-69 and 76-93 stand rejected.

Applicants gratefully acknowledge the indication by the Examiner that claims 33-38 and 70-75 recite patentable subject matter and have been allowed.

Claims 1-32, 39-69 and 76-93 stand rejected under 35 U.S.C. § 103(a) as being obvious over United States Patent No. 6,226,509 B1 ("Mole") in view of United States Patent No. 5,678,222 ("Hornak").

Claim 1 recites, in part, a mixer comprising a track and hold circuit and a bandpass circuit. Neither Mole nor Hornak teaches a mixer comprising a track and hold circuit and a bandpass circuit.

In the Office Action of December 30, 2005, the Examiner alleged that Mole describes a mixer 46 in FIG. 3 as a track and hold circuit. This is in error and contradicts the position taken previously by the Examiner that Mole does not teach a track and hold circuit.

To summarize the prosecution file history:

(1) Applicants successfully argued that Mole did not teach a track and hold circuit in the Response of May 25, 2005;

(2) The Examiner changed his position and, instead of relying on Mole, the Examiner relied on Molnar to allegedly teach the track and hold circuit;

(3) Applicants filed an appeal brief arguing the improper combination of Mole and Molnar; and

(4) Instead of filing a reply brief, the Examiner chose to withdraw Molnar, which was the basis of the alleged track and hold circuit, in the rejection and to substitute Hornak.

Thus, we should now all agree that Mole does not teach a track and hold circuit. Mole does not teach that mixer 46 in FIG. 3 of Mole as alleged by the Examiner (yet again in the most recent Office Action) is a track and hold circuit.

Applicants respectfully request that the Examiner refrain from supporting future rejections based on Mole teaching a track and hold circuit. It does not teach a track and hold circuit.

Furthermore, Hornak does not teach a track and hold circuit as part of a mixer. At most, FIG. 19 of Hornak shows a sample-and-hold element 279 *as part of a low-pass filter circuit 277*,

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which is not part of a time-share mixer 261. See, e.g., Hornak at FIG. 19 and col. 19, lines 11-24. Applicants neither admit nor deny that a sample-and-hold element is the same as a track and hold circuit. Even assuming, *for the sake of argument only*, that they are the same, Hornak still does not teach a mixer comprising a track and hold circuit. Hornak only illustrates a low-pass filter circuit 277 including a sample-and-hold element 279. The time-share mixer 261 does not include a sample-and-hold element.

In addition, if any part of the rejection is based on a belief that the dashed box 277 in FIG. 19 is a bandpass circuit as set forth in claim 1, then such a belief is in error since Hornak indicates that the dashed box 277 is a low-pass filter circuit and not a bandpass circuit.

For at least the above reasons, it is respectfully requested that the rejection of claim 1 and its dependent claims (i.e., claims 2-32) be withdrawn.

Claim 39 recites, in part, a mixer comprising a track and hold circuit and a bandpass circuit. Claim 61 recites, in part, a differential mixer comprising a track and hold circuit and a bandpass circuit. Claim 76 recites, in part, track and hold means and limiting means. Applicants have already indicated above that neither Mole nor Hornak teaches a mixer or differential mixer comprising a track and hold circuit. Mole does not teach a track and hold circuit. Hornak also does not teach a mixer comprising a track and hold circuit. Instead, Hornak illustrates a sample-and-hold element 279 which is part of a low-pass circuit 277 and which is not a time-share mixer 261.

For at least the above reasons, it is respectfully requested that the rejection of independent claims 39, 61 and 76 and their dependent claims (i.e., claims 40-60, 62-69 and 77-93, respectively) be withdrawn.

In view of at least the foregoing, it is respectfully submitted that the pending claims 1-93 are in condition for allowance. Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the below-listed telephone number.

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Dated: May 1, 2006

Respectfully submitted,

  
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